CLAIMS

1. A speaker system for picture receiver, comprising:

a first speaker for reproducing medium and high range sound which form a sound image nearly at the vertical center in the right and left region of the screen of a picture receiver; and

a second speaker for reproducing medium and low range sound under the screen,

wherein when a listening point is set at a point a first distance apart in forward direction of the screen and within a second distance from the front axis at the center of the right and the left of the screen, distance R1 from the sound source position of the first speaker to the listening point, distance R2 from the sound source position of the second speaker to the listening point, and crossover frequency f of the first speaker and the second speaker frequency-divided by dividing network satisfy the following relative formula:

$$| \exp(-j \times k \times R1) \times \exp(j \times D \times \pi/4) + (-1)^{D+1} \times \exp(-j \times k \times R2) \times \exp(-j \times D \times \pi/4) | \geq 1/\sqrt{2},$$

$k = 2\pi \times f/c$,

exp = exponential function,

j = unit of complex number,

c = sound velocity,

π = circular constant,

D = degree of dividing network (0 or positive integers).

2. The speaker system for picture receiver of claim 1, wherein the second

distance is 1 m, the crossover frequency f is 200Hz or over, and the second speaker satisfies the relative formula.

3. The speaker system for picture receiver of claim 1, wherein the first distance is three times the vertical size of the screen.

4. The speaker system for picture receiver of claim 1, wherein the crossover frequency f is not lower than 400Hz and not higher than 600Hz.

5. A speaker installing method of installing a speaker system for picture receiver comprising

a first speaker for reproducing medium and high range sound which form a sound image nearly at the vertical center in the right and left region of the screen of a picture receiver, and

a second speaker for reproducing medium and low range sound under the screen,

wherein the first speaker and the second speaker are installed in such place that when a listening point is set at a point a first distance apart in forward direction of the screen and within a second distance from the front axis at the center of the right and the left of the screen, distance R1 from the sound source position of the first speaker to the listening point, distance R2 from the sound source position of the second speaker to the listening point, and crossover frequency f of the first speaker and the second speaker frequency-divided by dividing network satisfy the following relative formula:

$$| \exp(-j \times k \times R1) \times \exp(j \times D \times \pi/4) + (-1)^{D+1} \times \exp(-j \times k \times R2)$$

$\times \exp(-j \times D \times \pi/4)| \geq 1/\sqrt{2}$,

$k = 2\pi \times f/c$,

exp = exponential function,

j = unit of complex number,

c = sound velocity,

π = circular constant,

D = degree of dividing network (0 or positive integers).

6. The speaker installing method of installing a speaker system for picture receiver of claim 5, wherein the second distance is 1 m and the crossover frequency f is 200Hz or over.

7. The speaker installing method of installing a speaker system for picture receiver of claim 5, wherein the first distance is three times the vertical size of the screen.

8. The speaker installing method of installing a speaker system for picture receiver of claim 5, wherein the crossover frequency f is not lower than400Hz and not higher than 600Hz.